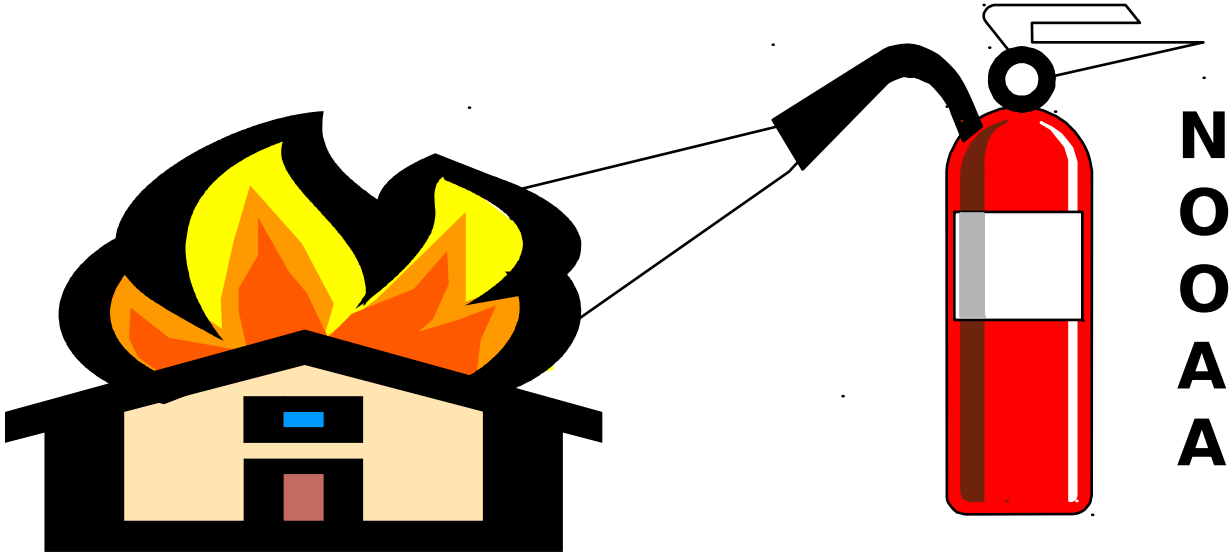
FIRE PREVENTION & PROTECTION



NFPA 101
OSHA 1910.38
OSHA 1910.157
AR 420-1
AK 420-1

Agenda

- Source of Fires
- The Fire Triangle
- Means of Egress = Escape Route
- Locking / Access to Exits
- Maintaining Portable Fire Extinguishers
- Extinguisher Classification
- P.A.S.S / R.A.C.E
- Fire Drills / Emergency Action Plan / Fire Prevention Plan
- Emergency Numbers
- Do Not fight the Fire If...

Sources of Fires

- Energized electrical equipment
- Hot surfaces
- Friction
- Smoking
- Cutting and welding
- Burner flames
- Spontaneous ignition
- Mechanical sparks
- Static electricity
- Lightning
- Cooking

The Fire Triangle!

- Fire prevention is keeping the 3 basic elements of a fire from coming together:

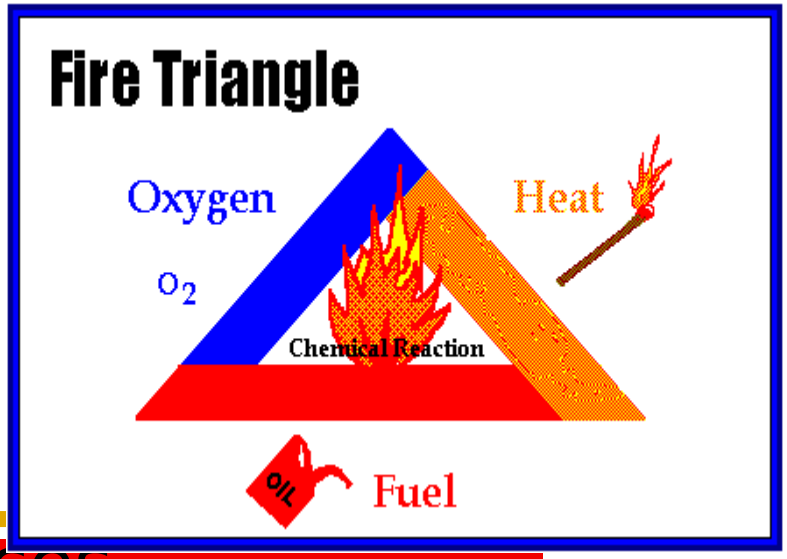
- Oxygen, heat (Ignition source), and fuel refer to as the “fire triangle”. Add in the fourth element, the chemical reaction, and you have a “tetrahedron.”

- Since oxygen is normall

present, prevention

involves controlling fuel

sources and ignition sources



Escape Routes General Requirements

- Fire alarms are required if a fire could start without providing adequate warning to occupants
- There must be enough exits in the proper arrangement for quick escape
- Adequate and reliable **illumination** must be provided for all exit facilities.

Means of Egress = Escape Route

- A continuous and unobstructed way of exit travel from any point in a building or structure to a public way (a street, yard, court or other open space leading to the street)

- Hazards – Restricted, block, or inadequate emergency exits

- Standard - Ensure that all personnel can evacuate the facility rapidly in case of fire or emergency. Unobstructed way of exit travel from any point in a building

Obstructed exit

Emergency/Fire Action Plan

- Emergency plans include as a minimum:

→ Escape procedures and escape route assignments
→ Critical plant operations shutdown procedure
→ Procedure to account for all personnel
→ Assignment of rescue and medical duties
→ Means for reporting emergencies
→ Identification of responsible persons to contact for further information

Access to Exits

- Exits must be readily accessible at all times
- A door from a room to an exit or escape route must be a side-hinged swinging type, and swing in the direction of exit travel when the room is occupied by more than 50 people or contains high hazard contents
- High hazard contents are those which are liable to burn with extreme rapidity or which may produce poisonous fumes or explosions in a fire. Examples include flammable chemicals and grain.

Maintaining Portable Fire Extinguishers

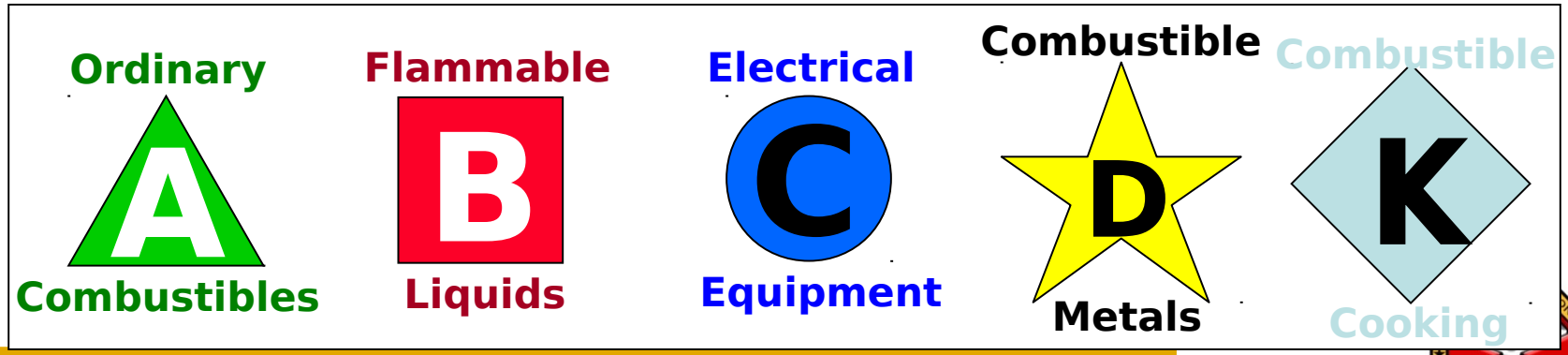
- Must maintain in a fully charged and operable condition
- Must conduct monthly inspection
- Must conduct an annual maintenance check by Fire Department
- Must keep in their designated places at all times except during use
- Must record the annual maintenance date and retain this record for one year after the last entry or the life of the shell, whichever is less
- Training for personnel required to participate in fire fighting

Blocked extinguisher

195
400 PSI
General

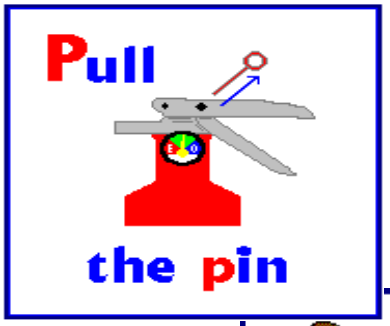
Extinguisher Classification

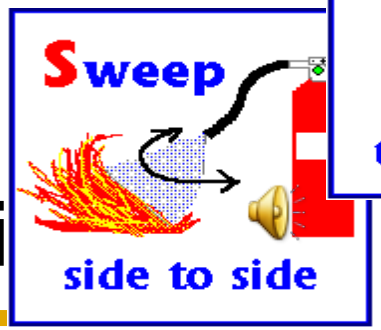
- **Class A** – ordinary combustibles (wood, cloth, paper)
- **Class B** – flammable liquids, gases, greases
- **Class C** – energized electrical equipment
- **Class D** – combustible metals
- **Class K** – combustible cooking media (Vegetable or animal oils and fats)



REMEMBER P.A.S.S.

- Pull the pin
- Aim at the base of the fire
- Squeeze the top handle or lever
- Sweep from side to si





Fire Drills

- All personnel all shifts
  - Quarterly (patient ca
    areas)
  - Annual (all others)
- Fire systems checks
  - Testing
  - Fire extinguishers
- Facility must comply w
  Life Safety Code

Emergency Numbers

- Activate the building fire alarm syste notify the fire department by Dialing:

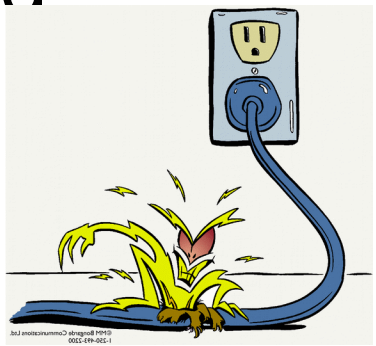
	DSN	Com/Cell
• Cp Casey	911	0505-730-5906 0505-732-9117
• CRC/Stanley	911	0505-738-0117
• Area II	911/117	0505-753-7911
• Cp Humphreys	911	0505-764-5911
• Area IV	911	031 -661-9111

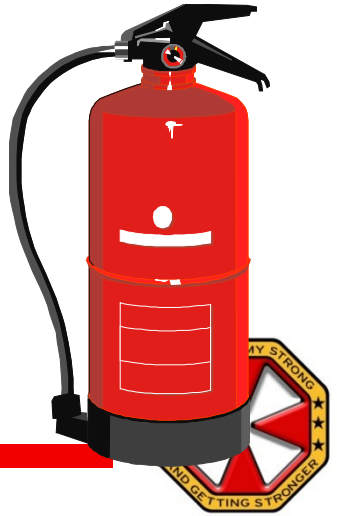
Cooking

Cooking is not authorized in USFK facilities. (Barracks rooms, Motorpool, Warehouses, maintenance shops, and etc.)

Cooking

- Don't leave cooking unattended
- Keep appliances clean
- Be alert
- Wear close-fitting sleeves
- Keep flammable objects clear of the stove
- Don't overload electrical outlets
- Turn pot handles in
- Heat oil slowly
- Have fire extinguisher handy





Cooking

Room Safety

- Smoking and using candles in room – “strictly prohibited.”

QUIZ

- **Fire Extinguishers should be inspected at least:**

a. once a week.

b. once a month.

c. once a year.

d. they don't need to be inspected.

QUIZ

- **An escape plan should include:**

a. Two ways out of every room and an outside meeting place.

b. Two ways out of every room and a fire extinguisher and a meeting place.

c. Two ways out of every room, smoke alarms, an outside meeting place and practice.

d. Two ways out of every room, smoke alarms, telephone, and an outside meeting place

QUIZ

If you want to do more to be safe at work area /home you should?

a. Practice your escape plan.

b. Inspect fire extinguishers monthly

c. Conduct fire drill.

d. All of the above

QUIZ

- **Heading down the hallway to the stairs and there is smoke - what should you do?**

a. Grab a towel and block your face.

b. Run.

c. Use your second way out.

d. Hold your breath.

QUIZ

- Use no more than four standard-size sets of decorative lights per single extension cord.

  a. True
  b. False

QUIZ

- Place all space heaters at least _____away from flammable materials

  a. 36 inches
  b. 2 feet
  c. 4 feet
  c. 48 inches

QUIZ

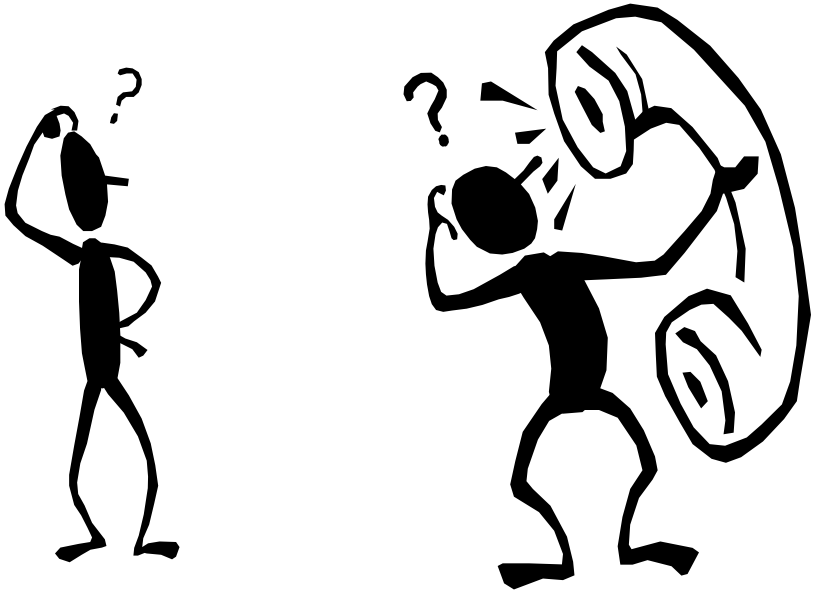
- As host(ess) of a party, you can be held legally responsible for injuries or damages that occur as a result of the alcohol served, even after the guests leave.

  a. True
  b. False

Never Fight A Fire If:

- You don't have adequate or appropriate equipment.
- You might inhale toxic smoke.
- If you don't know what is burning, you don't know what type of extinguisher to use.
- The fire is spreading rapidly beyond the spot where it started.

Questions



Eighth Army Safety 723-3934

Stay Safe

and

Make Another day!!